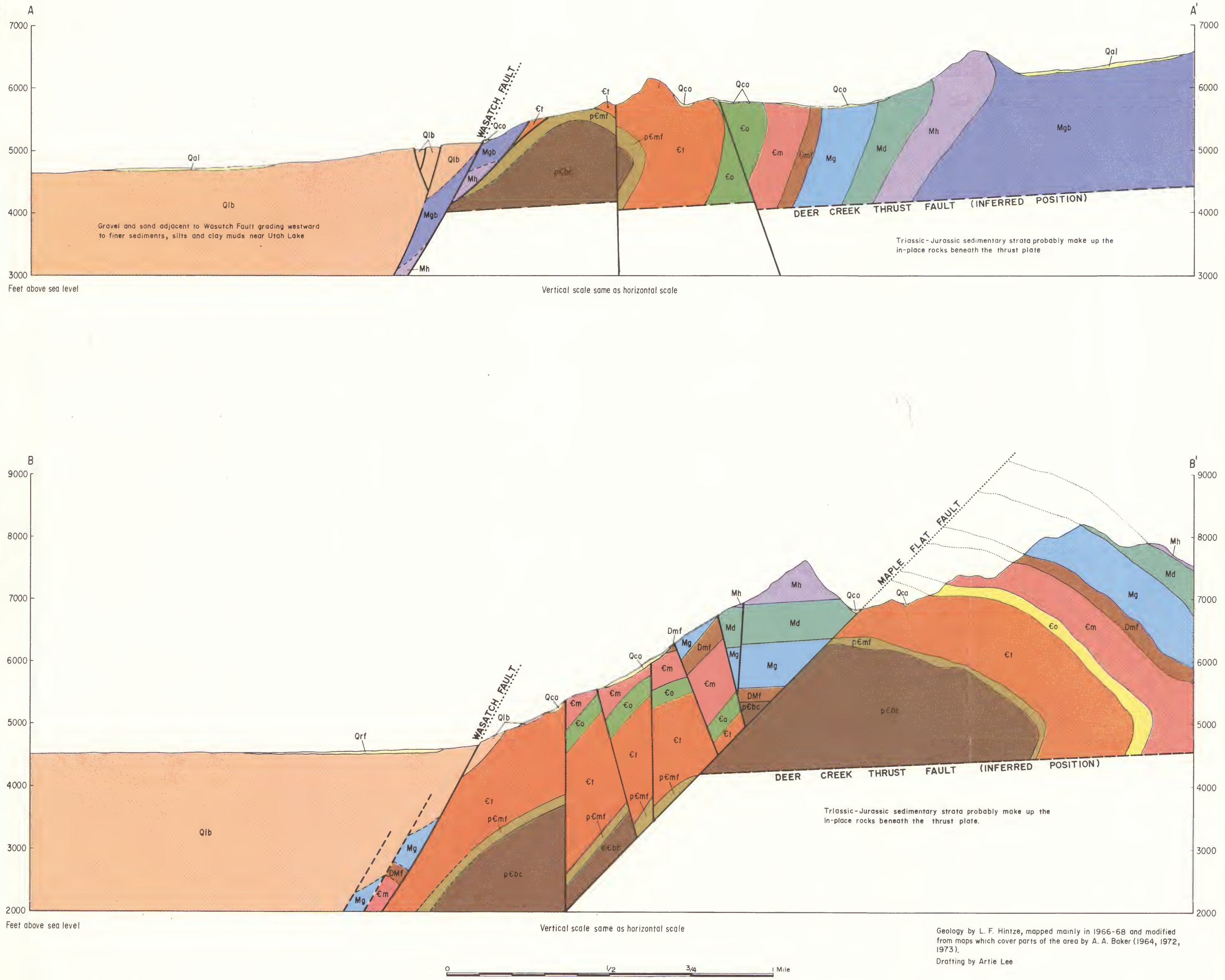


Gravel and sand adjacent to Wasatch Fault grading westward to finer sediments, silts and clay muds near Utah Lake

Triassic-Jurassic sedimentary strata probably make up the in-place rocks beneath the thrust plate

Triassic-Jurassic sedimentary strata probably make up the in-place rocks beneath the thrust plate.

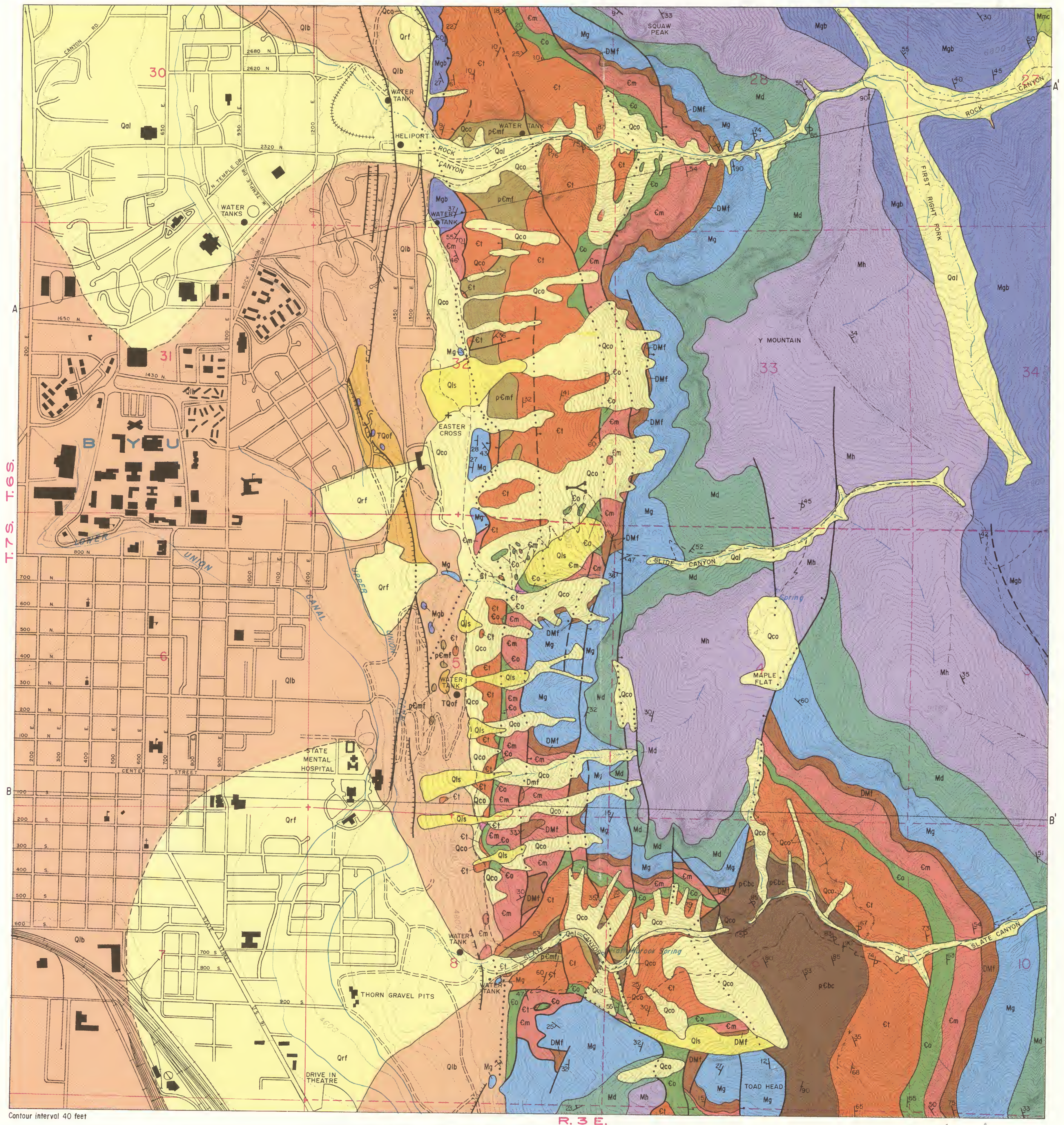
Geology by L. F. Hintze, mapped mainly in 1966-68 and modified from maps which cover parts of the area by A. A. Baker (1964, 1972, 1973).

Drafting by Artie Lee

CROSS SECTIONS of the Y MOUNTAIN AREA, EAST of PROVO, UTAH

Brigham Young University Geology Studies - Special Publication 5

BYU Map Collection



Contour interval 40 feet

GEOLOGIC MAP of the Y MOUNTAIN AREA, EAST of PROVO, UTAH

EXPLANATION

QUATERNARY	Recent	Qal Qrf Qco	Qal-Stream valley alluvium-rounded, stream transported debris. Qrf-Recent alluvial fan deposits. Qco-Colluvium-angular debris on hill slopes, includes talus.
	Pleistocene	Qls	Landslide, avalanche, slump, and mudflow deposits-unsorted angular debris; large limestone blocks abundant. Deposits common at base of steep snow basins and races on west front of range.
		Qlb	Lake Bonneville sediments undifferentiated-includes deposits of Provo, Alpine, and Bonneville age. Rounded gravel, sand, silt.
TERT.?	Pliocene?	TQof	Pre-Bonneville fan and landslide deposits.
MISSISSIPPIAN	Chesterian	Mmc	**Manning Canyon Shale** Black to brown shale with some interbedded limestone and sandstone. Plant fossils. About 1650 feet thick.
		Mgb	**Great Blue Limestone** Dark gray thin bedded limestone with much interbedded shale in lower third of formation. 2800 feet thick.
	Meramecian	Mh	**Humbug Formation** About 25% gray, brown or pink sandstones, interbedded with fine-grained to calcarenitic limestone and dolomite. About 930 feet thick.
		Md	**Deseret Limestone** Thin-to-thick bedded medium-to-dark gray encrinitic limestone and dolomite. Black and gray chert common in small nodules and bands. About 850 feet thick.
	Osagian	Mg	**Gardison Limestone** Bedded limestone; abundant corals and brachiopods in lowest 50 feet. Top of formation marked by 70 feet of limestone with black chert bands. Upper half of formation is interbedded limestone and dolomite. Total thickness approximately 550 feet.
DEV.	Kind Upper	DMf	**Fitchville Dolomite** Light-to-medium gray, vuggy, unfossiliferous dolomite with 20 feet of dolomitic sandstone at base. Totals 260 feet in thickness.
CAMBRIAN	Middle Cambrian	Єm	**Maxfield Limestone** Basal two-thirds is motted dark to medium gray limestone; upper third is medium to very light gray banded dolomite. Trilobite fragments common in a few beds in the lower part. Totals about 600 feet in thickness.
		Єo	**Ophir Formation** Olive, phyllitic shale, with 30 feet of thin bedded shaly limestone 170-200 feet above base. Lower 60 feet is greenish brown quartzite and phyllite. About 250 feet thick.
	Lower?	Єt	**Tintic Quartzite** Orange weathering, tan quartzite. From Slate Canyon southward the formation contains a diabase flow, up to 25 feet thick, 160 feet above the base of the formation. Quartzite below the diabase is generally white. Total thickness about 1080 feet.
PRECAMBRIAN	Late Precambrian	pЄmf	**Mineral Fork Tillite** Subangular boulders, cobbles, and pepples of dolomite and quartzite in an olive brown fine mud matrix. Slightly schistose. Not present south of Slate Canyon. About 145 feet is maximum thickness.
		pЄbc	**Big Cottonwood Formation** Red, purple and tan quartzite, gritstone, and quartz pepple conglomerate with 20% interbeds of purple and green slate. About 1100 feet exposed in Slate Canyon. Base concealed.

—·—·—·—	Resistant ridge-forming bed near top of Humbug Formation.
—x—x—x—	Diabase flow 160 feet above base of Tintic Quartzite.
———— - -	Contact. Dashed where approximately located.
┴┴┴┴┴┴┴┴	Fault scarp marking displacement of Quaternary deposits. Teeth on downthrown side.
⊥36	Strike and dip of beds.
——•——75	Fault, showing downthrown side and dip and stratigraphic throw where known.
▬ ▬ • • • •	Dashed where approximately located, dotted where inferred beneath cover.

Lehi F. Hintze
1978

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